to remember how much colour can vary or change with climatic conditions. It is not so difficult perhaps with resident birds, such as those dark-coloured birds, for example, in the damp wet climate of the Outer Hebrides, but in migrating birds coming from the north to different climates in the south there is a corresponding change in conditions (more and stronger sun, for example), which may definitely alter the colour and bleach a dark colour into a lighter one very quickly. Again, as Mrs. Meinertzhagen has shown ('A Practical Handbook of British Birds,' ii. 1924, p. 519), the colour on the back of British breeding *Charadrius h. hiaticula* darkens as they pass into their winter plumage, and renders their differentiation from birds from the north of Scotland and Scandinavia difficult, if not impossible.

## Some Notes on Eastern African Birds.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following five notes:—

(1) On the Seasonal Changes of Plumage in *Centropus grillii* Hartlaub, and its Relationship to other Forms.

Dr. James P. Chapin has recently drawn our attention to the seasonal change of plumage in *Centropus grillii*. Bowen, Proc. Ac. Nat. Sci. Philad. xciii. 1931, p. 32, has drawn attention to a non-breeding dress in an adult female from Ikoma Region, Tanganyika Territory, dated June 12, 1929, which is moulting from a black to a brown dress, and has no barring on the wings nor on the under side of the tail.

We have examined the series in the British Museum collection and have found an adult male, no date and no locality, Brit. Mus. Reg. no. 1923.8.7.7213, which is also moulting from a black to a brown dress, and has no barring on the flight-feathers or the under side of the tail. There are in the British Museum collection two other specimens in full non-breeding (brown) dress, *i. e.*, an adult female from Lake Chad, dated February 15, 1905, Brit. Mus. Reg. no. 1923.8.7.7211, and an adult female from Lagos, dated January 8, 1920, Brit. Mus. Reg. no. 1920.6.8.50. All these specimens have a brown-

coloured bill, whereas in breeding dress the bill is black. It is, therefore, clearly established that *Centropus grillii* has a brown non-breeding dress, from which the young bird is at once distinguishable by having the flight-feathers and the under side of the tail barred.

Mr. Hugh Whistler informs us that Centropus bengalensis Gmelin, also has a brown non-breeding dress. Rand, Bull. Amer. Mus. Nat. Hist. lxxii. 1936, p. 400, points out that Centropus toulou (Müll.) has a non-breeding dress. This is not so complete as in Centropus grillii, the blackish colouring being retained on the belly and under tail-coverts. It is also known that Centropus bengalensis javanicus Dumont has a brown non-breeding dress. A comparison of Centropus grillii, Centropus bengalensis, and Centropus toulou shows that they are conspecific, and we propose to unite them as follows:—

Centropus toulou toulou (Müller), Syst. Nat. Suppl. 1776, p. 90: Madagascar, and races.

Centropus toulou bengalensis Gmelin, Syst. Nat. iii. 1788, p. 412: Bengal, and races.

Centropus toulou grillii Hartlaub, J. f. O. 1861, p. 13: Gabon, and races.

For not only are they very similar in both breeding and non-breeding dress, but the fact of their having a non-breeding dress (which so far as Africa is concerned appears to be exceptional in the Centropidæ) strongly supports their relationship.

We have yet to learn which dress the young bird of *Centropus grillii* assumes in its first moult. If it moults soon after the end of the breeding season, we would expect to find it assuming a non-breeding dress, but if it does not moult until the beginning of the next breeding season we would expect to find it assuming the black breeding dress.

(2) On Campothera abingdoni kavirondensis Van Someren, Bull. B. O. C. xlvii. 1926, p. 70: Lolgorien, south Kavirondo, south-western Kenya Colony.

Dr. Van Someren has very kindly lent us the type and cotype of this race. These agree with C, a, smithi (Malherbe),

Rev. Zool. 1845, p. 403: Marico District, western Transvaal, in general colour and in the markings of the underparts, including the black throat to upper breast, but the mantle is spotted, not barred. It is true that the young bird of C. a. smithi has a spotted mantle, but the adults are distinctly Lynes, J. f. O. 1934, p. 67, obtained a pair of this bird at Iringa, Tanganyika Territory, and listed them as C.a.smithi. These specimens are in the British Museum collection, and agree in the spotting of the mantle with Van Someren's specimens, and are therefore C. a. kavirondensis. The distribution of C. a. kavirondensis is from south-western Kenya Colony to south-central Tanganyika Territory; the distribution of C. a. abingdoni is from eastern South Africa to Kilosa, eastern Tanganyika Territory; and that of C. a. mombassica from southern Italian Somaliland, eastern Kenva Colony and north-eastern and eastern Tanganyika Territory as far south as the Morogoro and Dar-es-Salaam Districts. Thus three races occur in close proximity to each other in Tanganyika Territory, but do not actually overlap in their distribution.

(3) On the Status of *Dendropicos fuscescens* (Vieillot) and *Dendropicos lafresnayi* Malherbe.

In the past all authors accepted two separate groups of these Woodpeckers, D. fuscescens and D. lafresnayi, placed under each the different races they recognised. instance, Van Someren, Nov. Zool. xxix. 1922, places D. lepidus as a race of D. lafresnayi and D. massaicus, D. centralis, and D. albicans as races of D. fuscescens, and furthermore takes D. hartlaubi out of both groups and places it as a race of D. abyssinicus, as did Claude Grant, Ibis, 1915, p. 460; and Roberts, Ann. Trans. Mus. x. 1924, p. 156, has given both D. fuscescens and D. hartlaubi specific rank with their separate races. Lynes, Journ. für Orn. 1934, p. 68, discusses this question and inclines to the opinion that there is one species only, and Vincent, Ibis, 1935, p. 20, is convinced that only one species exists throughout Africa. In view of these opinions and decisions, we have ourselves examined the question thoroughly, and agree with Lynes and Vincent that D. fuscescens and D. lafresnavi are conspecific. Therefore

all the races previously attached to D. lafresnayi, and including D. lafresnayi Malherbe itself, must become races of D. fuscescens (Vieillot).

(4) On the correct Type-locality of *Mesopicos goertæ abessinicus* Reichenow, Orn. Monatsb. 1900, p. 58.

Reichenow gives localities Abessinien, Kordofan, Sennar. Dr. Stresemann under date June 24, 1938, very kindly informs us that the type was "collected by Lepsius and Werne before 1850 in Abessinien." Dr. Richard Lepsius ('Discoveries in Egypt,' 1852, 'Discoveries in Egypt, Ethiopia and the Peninsular of Sinai in the Years 1842–1845') travelled up the Nile as far as Sero on the Blue Nile, and was therefore never in Abyssinia. Sero is to be found on modern maps as Sereiwa, Sereau, and Sereya, and the Ethiopia of Lepsius was the Meroe and Blue Nile areas of the Sudan.

Ferdinand Werne (Expedition to discover the sources of the White Nile in 1840–1841, 1849) apparently only travelled as far as Wad Medani on the Blue Nile, but travelled up the White Nile almost to the present Sudan–Uganda boundary. Werne, therefore, was never in Abyssinia. Lepsius and Werne did not travel ogether, the former had as companions Bonomi and Wild, and in the latter's party was Arnaud.

Therefore both Lepsius and Werne could not both have collected this type, but as Lepsius was in that part of the Sudan which he called Ethiopia, as it was then inhabited by Abyssinians, we can agree that the type came from the Blue Nile area. We therefore fix the type-locality as Sereya, some 15 miles north of Roseires, Blue Nile, eastern Sudan.

(5) On the Status of Jyngipicus obsoletus nigricans Neumann, J. f. O. 1904, p. 402: Uma River, Konta, southern Abyssinia.

All the characters given by Neumann are to be found in a series of Y. o. obsoletus, and the specimen from Langomeri in the British Museum collection mentioned by Neumann agrees perfectly with the series of Y. o. obsoletus. We are therefore of opinion that Jyngipicus obsoletus nigricans Neumann, must become a synonym of Yungipicus obsoletus obsoletus obsoletus (Wagler).

PURCHASED